

AMENDMENT
Serial No. 09/920,071

IN THE CLAIMS

Please amend the claims as follows:

6.(currently amended) An interlaced waveguide hologram comprising:
a. a first holographic recording; and,
b. a second holographic recording interlaced with the first holographic recording;
each of said first and second holographic recordings being formed using a photolithographic mask and a view region mask, each of said masks having a series of light transmissive openings having respective selected interdistances between said openings.

12.(currently amended) A three-dimensional holographic liquid crystal display system comprising:
a. a backlight;
b. a first waveguide hologram;
c. a liquid crystal display, and

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d. a second waveguide hologram having a first holographic recording interlaced with a second holographic recording, said second waveguide hologram being positioned between said first waveguide hologram and the liquid crystal display; each of said first and second holographic recordings being formed using a photolithographic mask and a view region mask, each of said masks having a series of light transmissive openings having respective selected inter-distances between said openings.

15.(currently amended) A method of making an interlaced waveguide hologram master comprising:

a. forming a first holographic recording at a first position by positioning a photolithographic mask in a first position over a substrate coated with emulsion and indexing fluid;
positioning a view region mask in a corresponding first position;

b. forming a second holographic recording by at a second position wherein positioning the photolithographic mask in a second position over the substrate coated with emulsion and indexing fluid;

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positioning a view region mask in a corresponding second position;
said second holographic recording is interlaced with said first holographic
recording;

each of said photolithographic and viewing masks having a series of light
transmissive openings having respective selected inter-distances between said
openings.

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17.(currently amended) The method of claim 16, wherein the first position
corresponds a to a right viewing field and the second position corresponds to a left
viewing field.

18.(currently amended) The method of claim 16, wherein the photolithographic mask
comprises a series of equally spaced lines, wherein predetermined lines mask
holographic recording recording.

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24.(currently amended) A method of making a three-dimensional holographic liquid
crystal display system comprising the steps of:
a. providing a first waveguide hologram;

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(5) and d)

- b. providing a second waveguide hologram having a first holographic recording interlaced with a second holographic recording each of said first and second holographic recordings being formed using a photolithographic mask and a view region mask, each of said masks having a series of light transmissive openings having respective selected inter-distances between said openings;
- c. providing a backlight and a liquid crystal display;
- d. arranging said first waveguide hologram and said second waveguide hologram between said backlight and said liquid crystal display so that said first waveguide hologram is aligned adjacent to said backlight and said second waveguide hologram is aligned between said first waveguide hologram and said liquid crystal display.

25.(currently amended) The method of claim 24, further comprising the steps of positioning a micro-collimator array between the backlight and said first hologram.